

lan, wing 84.5, 86.5, 88; tail, 38, 39.5, 40.5: Mindanao, wing 86, 86, 86; tail, 39, 43, 43.5). Longer series may show that the Mindanao population is worthy of nomenclatorial recognition, in which case the name *apo Hachisuka* is available. Hachisuka described this as a large race confined to Mount Apo, Mindanao, but apparently compared his material only with Basilan specimens of *fulvifasciatus*. He gave measurements of one male and one female, and I have measured an additional female from Mount Apo. The two females are slightly larger (wing 90, 90) than the other Mindanao females measured (wing 86, 86, 86), but the male (wing 88) falls right between the two others from Mindanao (wing 87, 89). Hachisuka's method of tail measurement was apparently not the same as mine, since his figures are several millimetres higher.

I am indebted to Dr. Dean Amadon for permission to use the facilities of the American Museum of Natural History for this study.

Note on *Cinnyris manoensis* Reichenow

by MR. J. D. MACDONALD

Received 30th October, 1957

There are different opinions regarding the relationships of *Cinnyris manoensis* Reichenow, 1907, from Mano at the north end of Lake Nyasa (9°15' S; 33°48' E). Sclater (1930: 694) listed it as a race of *chalybeus* with the remark that it was only known from the type. What was thought by Lynes (1934: 116) to be a second specimen was taken by him at Dabaga, south-west of Iringa (8°10' S; 35°45' E); he noted that it resembled the type "except in being considerably darker below the scarlet breast-band." Lynes listed it separately from other specimens collected in the same area, though not the same locality, which he identified as the race *ludovicensis* (now known to be *intermedius*). Meise (1937: 143) considered *manoensis* to be conspecific with *afra*, *ludovicensis* and *graueri*. Grant and Praed (1947: 84), who did much to clarify the identity of the races of *Cinnyris chalybeus* in east Africa, put *manoensis* into the synonymy of *intermedius*. Schouteden (1949: 164; 1956: 186) and Chapin (1954: 248) identified as *manoensis* specimens taken in the south-east Belgian Congo.

In order to resolve these differences Dr. E. Stresemann lent from the Berlin Museum the type of *manoensis* (and also the type of *Cinnyris chalybeus gertrudis* Grote); Dr. Schouteden of the Belgian Congo Museum, Tervuren, and Dr. D. Amadon of the American Museum of Natural History lent the specimens from the south-east Belgian Congo identified as *manoensis*; and the Director of the Museo Bocage, Lisbon, lent the type of *Cinnyris intermedius* (Bocage).

In the first place the *manoensis* type clearly belongs to the species *chalybeus*. It is practically identical in every feature with the type of *bractiatus* and therefore the name cannot be put into the synonymy of *intermedius* unless *bractiatus* goes also. But *bractiatus* and *intermedius* are readily distinguished and their characters remain fairly constant throughout populations with quite well defined allopatric ranges. Therefore it is only the names *bractiatus* and *manoensis* which are synonymous and as *manoensis* is older (1907) it takes precedence over *bractiatus* (1933).

The characters distinguishing *intermedius* and *manoensis* (olim *bractiatus*) can now be defined more clearly than was done by Grant and Praed.

One of the most significant features is the iridescent bluish or purplish colour on the tips of the upper tail coverts. This colour is present in *manoensis*, though in lesser amount than in other races of *chalybeus*, but it is absent in *intermedius*. In some *intermedius* the upper tail coverts are tipped with iridescent green, similiar to mantle colour, and the rest have no iridescent colours at all; these variations occur in approximately equal proportions in the sample examined and they appear to be irregular in geographical distribution. This colour difference between *manoensis* and *intermedius* is correlated with a size difference which appears to be significant, especially in the length of the bill, as follows:—

	<i>manoensis</i>	<i>intermedius</i>
Wing:	59 – 67; Mn. 63.3 mm.	59 – 65; Mn. 61.3 mm.
Tail:	42 – 50; Mn. 45.75 mm.	38 – 45; Mn. 40.4 mm.
Bill:	23 – 27; Mn. 24.4 mm.	19 – 22; Mn. 19.9 mm.

For the most part the junction of the races is quite well defined. It lies roughly south-west to north-east along the upper Zambesi and its tributary the Loangwa. There are several small distributional inconsistencies. For instance, of two specimens from the Khana River, Southern Rhodesia (18°35' S; 28°30' E) and another two from Danger Hill, Mpika District, Northern Rhodesia (11°32' S; 31°36' E) one of each is identifiable with each of the races. Although from the same localities perhaps it is significant that the specimens were taken on different days and may not therefore have belonged to interbreeding populations. An apparent over-lap is indicated by two specimens from Lavusha Manda, Mpika District (12°22' S; 30°52' E) having the characters of *manoensis* and two from Metenje, Serenje District (12°50' S; 31°10' E) having those of *intermedius*. A specimen from Blantyre (12°50' S; 35°5' E) well inside the range of *manoensis* has the dimensions of that race but lacks iridescent colours on the upper tail coverts.

There is a west to east junction of the races between the Loangwa and Lake Nyasa at about latitude 13°50' S; for example, in Nyasaland Benson (1953: 72) says that *bractiatus* (= *manoensis*) is replaced by *intermedius* from Nchisi (13° 20' S) northwards. Beyond Lake Nyasa information is scantier and racial limits are more difficult to define. Benson found *manoensis* on the Njesi plateau on the east side of the lake (12°45' S) ten miles north of Unangu. (The specimen is not listed in his paper in *Ibis*, 1946). The type of the race, a specimen with average characters, is from Mano which is just north of the lake, but Meise got three specimens (not examined) from the Matengo highlands (10°50' S) on the east side which lack the iridescent bluish colour on the upper tail coverts as in *intermedius*. Specimens which are not quite typical of either race are the type of *Cinnyris chalybeus gertrudis* Grote from Songea (10°40' S) and the Lynes specimen from Dabaga. The former has about equal amounts of iridescent bluish and greenish colour on the upper tail coverts and dimensions which would fit either race — unfortunately the bill is broken. The latter has bluish colour on the upper tail coverts as in *manoensis*, dimensions more akin to those of *intermedius* but a wide scarlet breast band and a belly colour not quite typical of either: other specimens taken in this area, but not actually at Dabage, are more like *intermedius*.

The specimens listed by Schouteden and Chapin as *manoensis* all come from the Marunga highlands (app. 7°30' S; 30°0' E) in the south-east

Belgian Congo just west of the south end of Lake Tangayika. It is now found that these specimens are a better match with the races *whytei* and *graueri* currently attached to the species *Cinnyris afer*, but they are not identical with either. They are very similar in dimensions and the relatively longer tails of *whytei* and *graueri* readily distinguish this group from races of *chalybeus*. It seems likely that these birds are representatives of a group of related populations now isolated at high altitudes on the mountain chain bordering the great Rift Valley. The Marungu highlands would appear to belong to this chain and lie between the Nyika plateau in northern Nyasaland, where *whytei* is found, and the Kivu group of mountains, where *graueri* occurs; other links in the chain are Ruwenzori with the race *stuhmanni* and mountains south of Kivu with the recently discovered *chapini*. The Marungu specimens, though few in number for critical determination, seem to be sufficiently distinct to warrant a separate name, as follows:—

Cinnyris Afer Prigoginei new race

Description: Iridescent colours of head and mantle bluish-green as in *graueri*, not yellowish-green as in *whytei* and races of *chalybeus*; iridescent colours of upper tail coverts and narrow breast band purplish as in *graueri*, not bluish as in *whytei* and races of *chalybeus*; scarlet breast band narrow as in races of *chalybeus*, not broad as in *afer*; belly colour and dimensions similar to *whytei*.

Distribution: Marungu highlands, south-east Belgian Congo.

Type: Adult male from Sambwe, Marungu highlands, taken on 28th February, 1929, at 6100 feet. Dimensions: wing 64, tail 52, bill 22 mm. American Museum of Natural History Reg. No. 289664.

Remarks: In keeping with the practice adopted with related races this one is named after another well-known African ornithologist, Dr. A. Prigogine.

References:—

- Benson, C. W. 1953. "A Check-list of the Birds of Nyasaland."
 Chapin, J. P. 1954. "Birds of the Belgian Congo." Vol. 4.
 Grant, C. H. B. & Praed, C. W. M. 1947. Bull. B. O.C. 67.
 Lynes, H. 1934. Journ. Orn. 82 Supp.
 Meise, W. 1937. Mittl. zool. Mus. Berlin 22.
 Schouteden, H. 1949. Rev. Zool. Bot. Afr. 42.
 Schouteden, H. 1956. Ann. Mus. Congo Belg. Zool. Ser. 4, Vol. 5, Fase. 1.
 Sclater, W. L. 1930. Systema Avium Aethiopicarum, Vol 2.

On the Populations of the Bullfinch, *Pyrrhula pyrrhula* Brisson in Western Europe, and the possible Significance of certain Aberrant Characters in that Species.

PART ONE

by DR. JAMES M. HARRISON

Received 1st October, 1957

The problems of the taxonomy of the Bullfinch *Pyrrhula pyrrhula* Brisson in western Europe have been investigated by a number of eminent systematists including Hartert¹ (1910 – 22), Matthews and Iredale² (1917), Stresemann³ (1919 – 28), Niethammer⁴ (1930), Mayaud, Heim de Balsac